

IN THE CLAIMS

1. An endo-tracheal tube retainer used to facilitate the removal of a laryngeal mask of the type used to facilitate lung ventilation and the insertion of endo-tracheal tubes or related medical instruments through a patient's laryngeal opening, said laryngeal mask being removed from a patient's oropharynx without dislodging any inserted endo-tracheal tubes or related medical instruments passing through the laryngeal mask into the patient's tracheal tube, said endo-tracheal tube retainer comprising:

a solid semi-rigid stylet rod having proximal and distal ends; and

a connection adapter tapered from a proximal end of said connection adapter to a distal end of said connection adapter for secure insertion within a range of endo-tracheal tubes, said adapter being secured to said distal end of said solid stylet rod.

2. The endo-tracheal tube retainer of claim 1 wherein said endotracheal tube retainer is used to facilitate the removal of a laryngeal mask of the type having a flexible respiratory tube, and said endo-tracheal tube retainer is sufficiently small in diameter to pass through said flexible respiratory tube.

3. The endo-tracheal tube retainer of claim 1 wherein said stylet is adapter for use independently of the endo-tracheal tube as an intubating stylet.

4. The endo-tracheal tube retainer of claim 2 wherein said semi-rigid stylet is of sufficient length to extend from the laryngeal opening to a point external to a patient's oral cavity.

5. The endo-tracheal tube retainer of claim 1 wherein said connection adapter is removably secured to said semi-rigid stylet by means of a threaded connector.

6. The endo-tracheal tube retainer of claim 1 wherein an exterior surface of said connection adapter comprises:

a plurality of longitudinal grooves permitting passage of air and fluids past said endo-tracheal tube retainer after insertion within an endo-tracheal tube; and

a plurality of threads angled to facilitate insertion of said endo-tracheal tube retainer within an endo-tracheal tube, but hindering withdrawal of said endo-tracheal tube retainer from said endo-tracheal tube.

7. The endo-tracheal tube retainer of claim 6 wherein the connection adapter is composed of soft, semi-rigid material, sufficiently flexible to permit said connection adapter to traverse through said endo-tracheal tube after positioning within the oropharynx region.

8. The endo-tracheal tube retainer of claim 6 wherein said longitudinal grooves are equispaced around said connection adapter exterior surface.

9. The endo-tracheal tube retainer of claim 8 wherein there are at least four longitudinal grooves.

10. (previously amended) A method for removing an inflatable laryngeal mask from a patient without dislodging an inserted mask into the patient's laryngeal opening by using a tube retaining device, the method comprising the steps of:

inserting the tube retaining device through an opening in the inflatable laryngeal mask exterior to the oral cavity;

securing the tube retaining device within a proximal end of the previously inserted endo-tracheal tube within said inflatable laryngeal mask;

deflating said inflatable laryngeal mask;

simultaneously withdrawing said deflated inflatable laryngeal mask from the patient's oral cavity and exerting a retaining force on the tube retaining device sufficient to prevent friction from dislodging said endo-tracheal tube; and

sliding the inflatable laryngeal mask off the proximal end of said retaining device.

11. (previously amended) A method for removing an inflatable laryngeal mask from a patient without dislodging any inserted endo-tracheal tubes or related medical instruments into the patient's laryngeal opening by using a tube retaining device, the method comprising the steps of:

securing the tube retaining device within a proximal end of an endotracheal tube;
inserting the endotracheal tube through an opening in the inflatable laryngeal mask;
removing said inflatable laryngeal mask by withdrawing said inflatable laryngeal mask from the patient's oral cavity and exerting a retaining force on the tube retaining device sufficient to prevent friction from dislodging said endo-tracheal tube; and
removing the inflatable laryngeal mask.

12. The method of claim 11 wherein removing the inflatable laryngeal mask comprises separating the tube retaining device from the endotracheal tube and sliding the inflatable laryngeal mask off an end of the tube retaining device.

13. The method of claim 11 wherein removing the inflatable laryngeal mask comprises sliding the inflatable laryngeal mask off a proximal end of the tube retaining device.

14. (new) A method for removing an laryngeal mask from a patient without dislodging any inserted endo-tracheal tubes or related medical instruments into the patient's laryngeal opening by using a tube retaining device, the method comprising the steps of:

inserting the endotracheal tube through an opening in the laryngeal mask;
securing the tube retaining device within an endotracheal tube;
removing said laryngeal mask by withdrawing said laryngeal mask from the patient's oral cavity and exerting a force on the tube retaining device sufficient to prevent dislodging said endo-tracheal tube; and
removing the inflatable laryngeal mask.

15. (new) The method of claim 14 wherein removing the laryngeal mask comprises separating the tube retaining device from the endotracheal tube and sliding the laryngeal mask off an end of the tube retaining device.

16. (New) The method of claim 14 wherein removing the laryngeal mask comprises sliding the laryngeal mask off a proximal end of the tube retaining device.